

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) ~~Device~~ A device for removing biomolecules comprising an ultrafiltration module optionally upstream and in series with a dialysis module, ~~characterized in that~~ wherein this device further comprises a column containing an adsorbent gel combining the properties of size exclusion and affinity chromatographies, said adsorbent gel consisting essentially of a polysaccharide matrix onto which is grafted a polymer coupled to an affinity ligand and having an adjustable cut-off of between 2 kDa and 60 kDa, said column being mounted branching from said ultrafiltration module.

2. (Currently Amended) ~~Device~~ The device according to claim 1, ~~characterized in that~~ wherein the adsorbent gel consists of a matrix based on an agarose derivative onto which is grafted polyethylene glycol coupled to iminodiacetic acid itself coupled to copper(I) ions and having a cut-off of 20 kDa.

3. (Currently Amended) ~~Device~~ A device for separating and purifying biomolecules comprising a column containing an adsorbent gel combining the properties of size exclusion and affinity chromatographies, said gel consisting essentially of a polysaccharide matrix onto which is grafted a polymer coupled to an affinity ligand and having an adjustable cut-off of between 2 kDa and 60 kDa, said column being mounted branching from said ultrafiltration module.

4. (Currently Amended) ~~Device~~ The device according to claim 3, ~~characterized in that~~ wherein the adsorbent gel consists of a matrix based on an agarose derivative onto which is grafted polyethylene glycol coupled to iminodiacetic acid itself coupled to copper(I) ions and having a cut-off of 20 kDa.

5. (Currently Amended) ~~Device~~ The device according to claim 2, ~~characterized in that~~ wherein the biomolecule is serum β 2-microglobulin.

6. – 8. (Canceled)

9. (Currently Amended) ~~Device~~ The device according to claim 1, ~~characterized in that~~
wherein the device is an extracorporeal dialysis system.

10. (New) The device according to claim 4, wherein the biomolecule is serum β 2-microglobulin.

11. (New) The device according to claim 3, wherein the device is an extracorporeal dialysis system.

12 (New) A method for removing biomolecules from blood, said method comprising passing said blood in a device according to claim 1.

13. (New) The method according to claim 10, wherein the device comprises an adsorbent gel consisting of a matrix based on an agarose derivative onto which is grafted polyethylene glycol coupled to iminodiacetic acid itself coupled to copper(I) ions and having a cut-off of 20 kDa.

14. (New) The method according to claim 11, wherein the biomolecule is serum β 2-microglobulin.

15. (New) The method according to claim 10, wherein the device is an extracorporeal dialysis system.

SUPPORT FOR THE AMENDMENT

Claims 6-8 have been canceled.

Claims 1-5 and 9 have been amended.

Claims 10-15 have been added.

The amendment of Claims 1-5 and 9 is supported by the corresponding claims as previously pending and the specification as originally filed. Original Claims 5 and 9 support new Claims 10-11. Original Claims 6-8 and Example 2 beginning on page 14, line 31 of the present specification support new Claims 12-15.

No new matter has been added by the present amendment.